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* * * * * Welcome to STN International * * * * *

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	AUG 10	Time limit for inactive STN sessions doubles to 40 minutes
NEWS	3	AUG 18	COMPENDEX indexing changed for the Corporate Source (CS) field
NEWS	4	AUG 24	ENCOMPLIT/ENCOMPLIT2 reloaded and enhanced
NEWS	5	AUG 24	CA/CAPplus enhanced with legal status information for U.S. patents
NEWS	6	SEP 09	50 Millionth Unique Chemical Substance Recorded in CAS REGISTRY
NEWS	7	SEP 11	WPIDS, WPINDEX, and WPIX now include Japanese FTERM thesaurus
NEWS	8	OCT 21	Derwent World Patents Index Coverage of Indian and Taiwanese Content Expanded
NEWS	9	OCT 21	Derwent World Patents Index enhanced with human translated claims for Chinese Applications and Utility Models
NEWS	10	NOV 23	Addition of SCAN format to selected STN databases
NEWS	11	NOV 23	Annual Reload of IFI Databases
NEWS	12	DEC 01	FRFULL Content and Search Enhancements
NEWS	13	DEC 01	DGENE, USGENE, and PCTGEN: new percent identity feature for sorting BLAST answer sets
NEWS	14	DEC 02	Derwent World Patent Index: Japanese FI-TERM thesaurus added
NEWS	15	DEC 02	PCTGEN enhanced with patent family and legal status display data from INPADOCDB
NEWS	16	DEC 02	USGENE: Enhanced coverage of bibliographic and sequence information

NEWS EXPRESS MAY 26 09 CURRENT WINDOWS VERSION IS V8.4,
AND CURRENT DISCOVER FILE IS DATED 06 APRIL 2009.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items

Enter NEWS followed by the item number or name to see news on that specific topic.

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 16:47:45 ON 02 DEC 2009

=> file registry

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

0.22

0.22

FILE 'REGISTRY' ENTERED AT 16:47:57 ON 02 DEC 2009

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STRUCTURE FILE UPDATES: 1 DEC 2009 HIGHEST RN 1194901-26-2

DICTIONARY FILE UPDATES: 1 DEC 2009 HIGHEST RN 1194901-26-2

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

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REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> s CHIR 258/cn

L1 1 CHIR 258/CN

=> d l1

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN

RN 692737-80-7 REGISTRY

ED Entered STN: 14 Jun 2004

CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (9CI)

OTHER NAMES:

CN CHIR 258

CN Dovitinib lactate

CN TKI 258

DR 1000873-96-0

MF C21 H21 F N6 O . C3 H6 O3

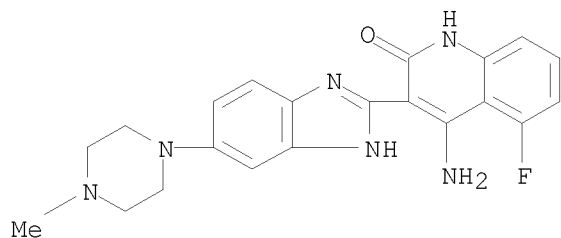
SR CA

LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

CM 1

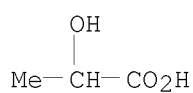
CRN 405169-16-6

CMF C21 H21 F N6 O



CM 2

CRN 50-21-5
CMF C3 H6 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

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2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
63 REFERENCES IN FILE CAPLUS (1907 TO DATE)

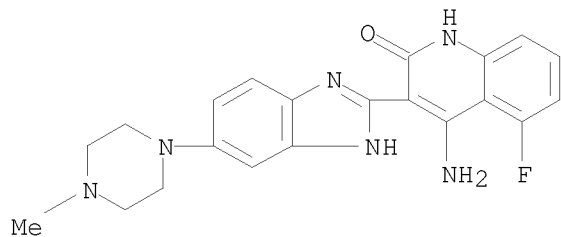
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L2 31 405169-16-6/CRN

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L2 ANSWER 1 OF 31 REGISTRY COPYRIGHT 2009 ACS on STN
RN 1187448-25-4 REGISTRY
ED Entered STN: 06 Oct 2009
CN INDEX NAME NOT YET ASSIGNED
MF C21 H21 F N6 O . x C3 H7 N O . C3 H6 O3
SR CA
LC STN Files: CA, CAPLUS

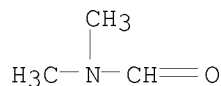
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CRN 405169-16-6
CMF C21 H21 F N6 O



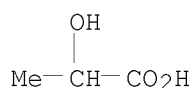
CM 2

CRN 68-12-2
CMF C3 H7 N O



CM 3

CRN 50-21-5
CMF C3 H6 O3



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d his

(FILE 'HOME' ENTERED AT 16:47:45 ON 02 DEC 2009)

FILE 'REGISTRY' ENTERED AT 16:47:57 ON 02 DEC 2009

L1 1 S CHIR 258/CN
L2 31 S 405169-16-6/CRN

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	10.41	10.63

FILE 'CAPLUS' ENTERED AT 16:49:05 ON 02 DEC 2009

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FILE COVERS 1907 - 2 Dec 2009 VOL 151 ISS 23

FILE LAST UPDATED: 1 Dec 2009 (20091201/ED)

REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009

USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 12

L3 64 L2

=> s 13 and ad<20031107

4775475 AD<20031107

(AD<20031107)

L4 2 L3 AND AD<20031107

=> d 14 1-2 ibib abs

L4 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1242789 CAPLUS

DOCUMENT NUMBER: 143:477969

TITLE: Preparation of benzimidazole quinolinones for inhibiting FGFR3 and treating multiple myeloma

INVENTOR(S): Cai, Shaopei; Chou, Joyce; Harwood, Eric; Heise, Carla C.; Machajewski, Timothy D.; Ryckman, David; Shang, Xiao; Wiesmann, Marion; Zhu, Shuguang

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 239 pp., Cont.-in-part of U.S. Ser. No. 644,055.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

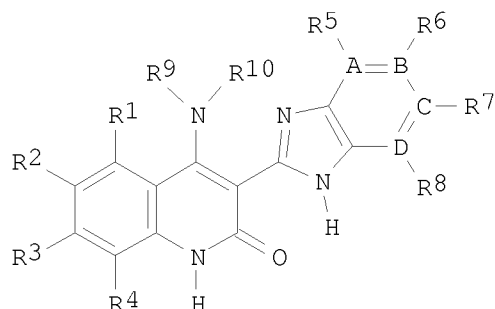
FAMILY ACC. NUM. COUNT: 7

PATENT INFORMATION:

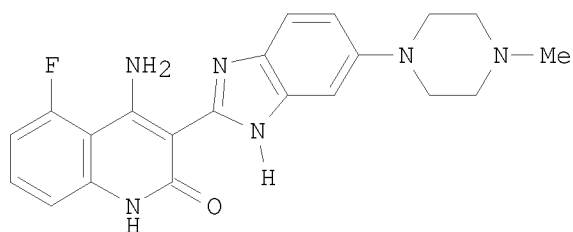
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US 20050261307	A1	20051124	US 2004-983174	20041105
US 20040092535	A1	20040513	US 2003-644055	20030819 <--
US 7470709	B2	20081230		
CN 1692112	A	20051102	CN 2003-824565	20030819 <--
US 20050203101	A1	20050915	US 2004-839793	20040505
ZA 2006003598	A	20080430	ZA 2006-3598	20060505
US 20090281100	A1	20091112	US 2008-317493	20081223
US 20090181979	A1	20090716	US 2009-398130	20090304
PRIORITY APPLN. INFO.:			US 2002-405729P	P 20020823
			US 2002-426107P	P 20021113
			US 2002-426226P	P 20021113
			US 2002-426282P	P 20021113
			US 2002-428210P	P 20021121
			US 2003-460327P	P 20030403
			US 2003-460328P	P 20030403
			US 2003-460493P	P 20030403
			US 2003-478916P	P 20030616
			US 2003-484048P	P 20030701
			US 2003-644055	A2 20030819
			US 2003-517915P	P 20031107
			US 2003-526425P	P 20031202
			US 2003-526426P	P 20031202
			US 2004-546017P	P 20040219
			US 2004-982543	B1 20041105

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:477969
GI



I



II

AB The title compds. I [A, B, C, and D = C, N; R1-R3 = H, halo, CN, NO2, etc.; R4 = H, alkyl; R5-R8 = H, halo, CN, NO2, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H], useful for inhibiting fibroblast growth factor receptor 3 or treating a biol. condition mediated by fibroblast growth factor receptor 3, were prepared E.g., a multi-step synthesis of 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H-quinolin-2-one (II), starting from 5-chloro-2-nitroaniline and 1-methylpiperazine, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 μ M with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1 ϵ , Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μ M. The mentioned above compound II was tested in various tests and showed significant antiproliferative activity. II inhibited FGFR3 receptor phosphorylation and ERK phosphorylation in multiple myeloma cell lines with activating FGFR3 mutations.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

L4 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1223876 CAPLUS

DOCUMENT NUMBER: 143:477966

TITLE: Preparation of benzimidazole quinolinones for inhibiting a checkpoint kinase 1 and their use in combination therapy for cancer

INVENTOR(S): Gesner, Thomas G.; Barsanti, Paul A.; Harrison, Stephen D.; Ni, Zhi-Jie; Brammeier, Nathan M.; Zhou, Yasheen; Le, Vincent P.

PATENT ASSIGNEE(S): Chiron Corporation, USA

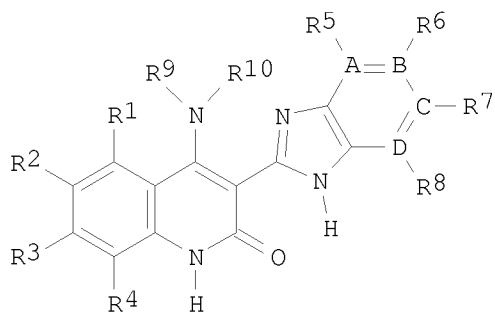
SOURCE: U.S. Pat. Appl. Publ., 249 pp., Cont.-in-part of U.S. Ser. No. 644,055.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050256157	A1	20051117	US 2005-41191	20050121
US 20040092535	A1	20040513	US 2003-644055	20030819 <--
US 7470709	B2	20081230		
CN 1692112	A	20051102	CN 2003-824565	20030819 <--
US 20050203101	A1	20050915	US 2004-839793	20040505
US 20090281100	A1	20091112	US 2008-317493	20081223
PRIORITY APPLN. INFO.:			US 2002-405729P	P 20020823
			US 2002-426107P	P 20021113
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			US 2003-484048P	P 20030701
			US 2003-644055	A2 20030819
			US 2004-538984P	P 20040123

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 143:477966; MARPAT 143:477966

GI



I

AB The title compds. [I; A, B, C, D = C, N; R1 = H, halo, CN, NO2, etc.; R2, R3 = H, halo, NO2, CN, etc.; R4 = H, (un)substituted alkyl; R5, R8 = H, (un)substituted alkyl, alkenyl, heterocyclyl; or R5 may be absent if A = N; or R8 may be absent if D = N; R6, R7 = H, halo, NO2, CN, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H; or R9 and R10 join together to form one or more rings, each having 5-7 members], useful for inhibiting checkpoint kinase 1, inducing cell cycle progression, and increasing apoptosis in cells, were prepared E.g., a multi-step synthesis of 4-amino-3-(benzimidazol-2-yl)-6-(4-methylpiperazinyl)hydroquinolin-2-one, was given. The compds. I were tested against various kinases. Two of the prepared compds. I, 4-[(3S)-1-azabicyclo[2.2.2]oct-3-ylamino]-3-(1H-benzimidazol-2-yl)-6-chloroquinolin-2-(1H)-one and 6-chloro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-4-[(piperidin-2-ylmethyl)amino]quinolin-2(1H)-one, were found to be potent inhibitors of CHK1 with IC50 of 0.32 nM and 0.63 nM, resp. The majority of the

exemplary compds. I displayed an IC50 of less than 10 μ M with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1 ϵ , Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μ M. The compds. I may be used to prepare pharmaceutical compns. and may be used in conjunction with DNA damaging agents.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 16:47:45 ON 02 DEC 2009)

FILE 'REGISTRY' ENTERED AT 16:47:57 ON 02 DEC 2009

L1 1 S CHIR 258/CN
L2 31 S 405169-16-6/CRN

FILE 'CAPLUS' ENTERED AT 16:49:05 ON 02 DEC 2009

L3 64 S L2
L4 2 S L3 AND AD<20031107

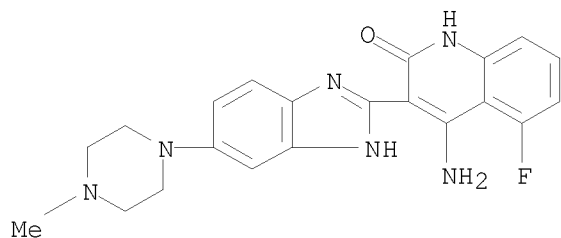
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L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 692737-80-7 REGISTRY
ED Entered STN: 14 Jun 2004
CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (9CI)
OTHER NAMES:
CN CHIR 258
CN Dovitinib lactate
CN TKI 258
DR 1000873-96-0
MF C21 H21 F N6 O . C3 H6 O3
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

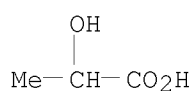
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CRN 405169-16-6
CMF C21 H21 F N6 O



CM 2

CRN 50-21-5
CMF C3 H6 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

61 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
63 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 1000873-96-0/dr
'DR' IS NOT A VALID FIELD CODE
L5 0 1000873-96-0/DR

=> FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.50	22.40
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-1.64

FILE 'REGISTRY' ENTERED AT 16:50:24 ON 02 DEC 2009
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STRUCTURE FILE UPDATES: 1 DEC 2009 HIGHEST RN 1194901-26-2
DICTIONARY FILE UPDATES: 1 DEC 2009 HIGHEST RN 1194901-26-2

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TSCA INFORMATION NOW CURRENT THROUGH June 26, 2009.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> S 1000873-96-0/RN

L6 1 1000873-96-0/RN

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SET COMMAND COMPLETED

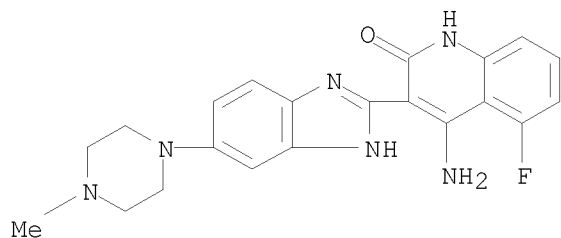
=> D L6 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.85 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2009 ACS on STN
RN 692737-80-7 REGISTRY
CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[6-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Propanoic acid, 2-hydroxy-, compd. with
4-amino-5-fluoro-3-[5-(4-methyl-1-piperazinyl)-1H-benzimidazol-2-yl]-2(1H)-
quinolinone (1:1) (9CI)
OTHER NAMES:
CN CHIR 258
CN Dovitinib lactate
CN TKI 258
DR 1000873-96-0
MF C21 H21 F N6 O . C3 H6 O3
SR CA
LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL
DT.CA CAplus document type: Conference; Journal; Patent
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study);
PREP (Preparation); PRP (Properties); USES (Uses)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological
study); USES (Uses)
RL.NP Roles from non-patents: BIOL (Biological study); PREP (Preparation);
PRP (Properties); USES (Uses)

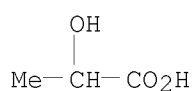
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CRN 405169-16-6
CMF C21 H21 F N6 O



CM 2

CRN 50-21-5
CMF C3 H6 O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

61 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
63 REFERENCES IN FILE CAPLUS (1907 TO DATE)

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NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.53	24.93
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.64

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FILE COVERS 1907 - 2 Dec 2009 VOL 151 ISS 23
FILE LAST UPDATED: 1 Dec 2009 (20091201/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Aug 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Aug 2009

CPlus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2009.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate
substance identification.

=> s 16

L7 63 L6

=> s 17 and ad<20031107

4775475 AD<20031107

(AD<20031107)

L8 2 L7 AND AD<20031107

=> d 18 1-2 ibib abs

L8 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1242789 CAPLUS

DOCUMENT NUMBER: 143:477969

TITLE: Preparation of benzimidazole quinolinones for
inhibiting FGFR3 and treating multiple myeloma

INVENTOR(S): Cai, Shaopei; Chou, Joyce; Harwood, Eric; Heise, Carla
C.; Machajewski, Timothy D.; Ryckman, David; Shang,
Xiao; Wiesmann, Marion; Zhu, Shuguang

PATENT ASSIGNEE(S): Chiron Corporation, USA

SOURCE: U.S. Pat. Appl. Publ., 239 pp., Cont.-in-part of U.S.
Ser. No. 644,055.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 7

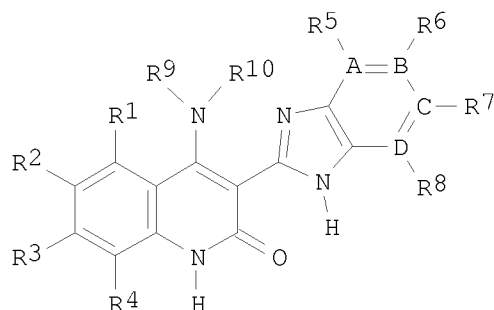
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050261307	A1	20051124	US 2004-983174	20041105
US 20040092535	A1	20040513	US 2003-644055	20030819 <--
US 7470709	B2	20081230		
CN 1692112	A	20051102	CN 2003-824565	20030819 <--
US 20050203101	A1	20050915	US 2004-839793	20040505
ZA 2006003598	A	20080430	ZA 2006-3598	20060505
US 20090281100	A1	20091112	US 2008-317493	20081223
US 20090181979	A1	20090716	US 2009-398130	20090304
PRIORITY APPLN. INFO.:			US 2002-405729P	P 20020823
			US 2002-426107P	P 20021113
			US 2002-426226P	P 20021113
			US 2002-426282P	P 20021113
			US 2002-428210P	P 20021121
			US 2003-460327P	P 20030403
			US 2003-460328P	P 20030403
			US 2003-460493P	P 20030403
			US 2003-478916P	P 20030616

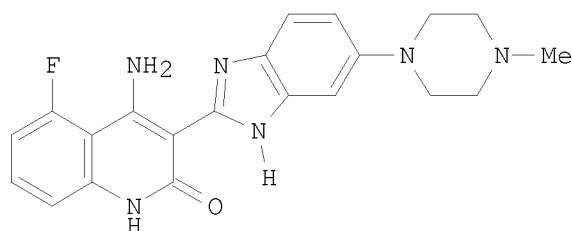
US 2003-484048P P 20030701
 US 2003-644055 A2 20030819
 US 2003-517915P P 20031107
 US 2003-526425P P 20031202
 US 2003-526426P P 20031202
 US 2004-546017P P 20040219
 US 2004-982543 B1 20041105

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:477969
 GI



I



II

AB The title compds. I [A, B, C, and D = C, N; R1-R3 = H, halo, CN, NO2, etc.; R4 = H, alkyl; R5-R8 = H, halo, CN, NO2, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H], useful for inhibiting fibroblast growth factor receptor 3 or treating a biol. condition mediated by fibroblast growth factor receptor 3, were prepared E.g., a multi-step synthesis of 4-amino-5-fluoro-3-[6-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-1H-quinolin-2-one (II), starting from 5-chloro-2-nitroaniline and 1-methylpiperazine, was given. The majority of the exemplary compds. I displayed an IC50 of less than 10 μ M with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1 ϵ , Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μ M. The mentioned above compound II was tested in various tests and showed significant antiproliferative activity. II inhibited FGFR3 receptor phosphorylation and ERK phosphorylation in multiple myeloma cell lines with activating FGFR3 mutations.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

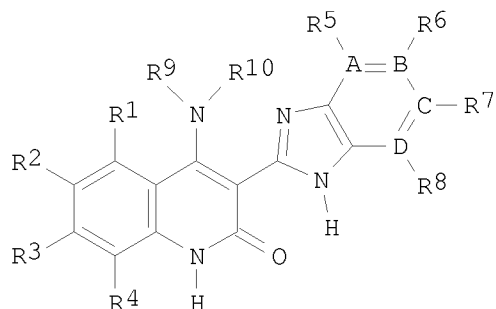
L8 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2009 ACS on STN
 ACCESSION NUMBER: 2005:1223876 CAPLUS

DOCUMENT NUMBER: 143:477966
 TITLE: Preparation of benzimidazole quinolinones for inhibiting a checkpoint kinase 1 and their use in combination therapy for cancer
 INVENTOR(S): Gesner, Thomas G.; Barsanti, Paul A.; Harrison, Stephen D.; Ni, Zhi-Jie; Brammeier, Nathan M.; Zhou, Yasheen; Le, Vincent P.
 PATENT ASSIGNEE(S): Chiron Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 249 pp., Cont.-in-part of U.S. Ser. No. 644,055.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050256157	A1	20051117	US 2005-41191	20050121
US 20040092535	A1	20040513	US 2003-644055	20030819 <--
US 7470709	B2	20081230		
CN 1692112	A	20051102	CN 2003-824565	20030819 <--
US 20050203101	A1	20050915	US 2004-839793	20040505
US 20090281100	A1	20091112	US 2008-317493	20081223
PRIORITY APPLN. INFO.:			US 2002-405729P	P 20020823
			US 2002-426107P	P 20021113
			US 2002-426226P	P 20021113
			US 2002-426282P	P 20021113
			US 2002-428210P	P 20021121
			US 2003-460327P	P 20030403
			US 2003-460328P	P 20030403
			US 2003-460493P	P 20030403
			US 2003-478916P	P 20030616
			US 2003-484048P	P 20030701
			US 2003-644055	A2 20030819
			US 2004-538984P	P 20040123

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): CASREACT 143:477966; MARPAT 143:477966
 GI



AB The title compds. [I; A, B, C, D = C, N; R1 = H, halo, CN, NO2, etc.; R2, R3 = H, halo, NO2, CN, etc.; R4 = H, (un)substituted alkyl; R5, R8 = H, (un)substituted alkyl, alkenyl, heterocyclyl; or R5 may be absent if A = N; or R8 may be absent if D = N; R6, R7 = H, halo, NO2, CN, etc.; R9 = H, (un)substituted alkyl, aryl, etc.; R10 = H; or R9 and R10 join together to form one or more rings, each having 5-7 members], useful for inhibiting checkpoint kinase 1, inducing cell cycle progression, and increasing

apoptosis in cells, were prepared E.g., a multi-step synthesis of 4-amino-3-(benzimidazol-2-yl)-6-(4-methylpiperazinyl)hydroquinolin-2-one, was given. The compds. I were tested against various kinases. Two of the prepared compds. I, 4-[(3S)-1-azabicyclo[2.2.2]oct-3-ylamino]-3-(1H-benzimidazol-2-yl)-6-chloroquinolin-2-(1H)-one and 6-chloro-3-[5-(4-methylpiperazin-1-yl)-1H-benzimidazol-2-yl]-4-[(piperidin-2-ylmethyl)amino]quinolin-2(1H)-one, were found to be potent inhibitors of CHK1 with IC50 of 0.32 nM and 0.63 nM, resp. The majority of the exemplary compds. I displayed an IC50 of less than 10 μ M with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, Cdk4, MEK1, NEK-2, CHK2, CK1 ϵ , Raf, Fyn, Lck, Rsk2, PAR-1, c-Kit, c-ABL, p60src, FGFR3, FLT-3, PDGFR α , and PDGFR β . In addition, many of the exemplary compds. exhibited IC50 values in the nM range and show potent activity with respect to VEGFR1, VEGFR2, VEGFR3, FGFR1, FGFR3, c-Kit, c-ABL, FLT-3, CHK1, Cdc2, GSK-3, NEK-2, Cdk2, MEK1, CHK2, Fyn, Lck, Rsk2, PAR-1, PDGFR α , and PDGFR β with IC50 values of less than 1 μ M. The compds. I may be used to prepare pharmaceutical compns. and may be used in conjunction with DNA damaging agents.

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)

=> d his

(FILE 'HOME' ENTERED AT 16:47:45 ON 02 DEC 2009)

FILE 'REGISTRY' ENTERED AT 16:47:57 ON 02 DEC 2009

L1 1 S CHIR 258/CN
L2 31 S 405169-16-6/CRN

FILE 'CAPLUS' ENTERED AT 16:49:05 ON 02 DEC 2009

L3 64 S L2
L4 2 S L3 AND AD<20031107

FILE 'REGISTRY' ENTERED AT 16:49:48 ON 02 DEC 2009

FILE 'CAPLUS' ENTERED AT 16:49:49 ON 02 DEC 2009

L5 0 S 1000873-96-0/DR

FILE 'REGISTRY' ENTERED AT 16:50:24 ON 02 DEC 2009

L6 1 S 1000873-96-0/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'CAPLUS' ENTERED AT 16:50:46 ON 02 DEC 2009

L7 63 S L6
L8 2 S L7 AND AD<20031107

=> file medline embase biosis

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	9.24	34.17
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-1.64	-3.28

FILE 'MEDLINE' ENTERED AT 16:51:43 ON 02 DEC 2009

FILE 'EMBASE' ENTERED AT 16:51:43 ON 02 DEC 2009

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FILE 'BIOSIS' ENTERED AT 16:51:43 ON 02 DEC 2009
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=> s l2
L9 0 L2

=> s l2<chem>

SmartSELECT INITIATED
New TRANSFER and ANALYZE Commands Now Available
See HELP TRANSFER and HELP ANALYZE for Details

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	5.07	39.24
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.28

FILE 'REGISTRY' ENTERED AT 16:51:51 ON 02 DEC 2009
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SET SMARTSELECT ON
SET COMMAND COMPLETED

SEL L2 1- CHEM
L10 SEL L2 1- CHEM : 36 TERMS

SET SMARTSELECT OFF
SET COMMAND COMPLETED

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	15.08	54.32
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-3.28

FILE 'MEDLINE' ENTERED AT 16:51:53 ON 02 DEC 2009

FILE 'EMBASE' ENTERED AT 16:51:53 ON 02 DEC 2009
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FILE 'BIOSIS' ENTERED AT 16:51:53 ON 02 DEC 2009
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S L10
L11 107 L10

=> s l11 and (?cancer? or ?tumor? or ?tumour? or ?neoplasm?)
L12 93 L11 AND (?CANCER? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLASM?)

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PROCESSING COMPLETED FOR L12
L13 87 DUP REM L12 (6 DUPLICATES REMOVED)

=> s 113 and pd<20031107
1 FILES SEARCHED...
L14 5 L13 AND PD<20031107

=> d 114 1-5 ibib abs

L14 ANSWER 1 OF 5 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 2003481481 EMBASE
TITLE: The impact of anti-angiogenic agents on cancer therapy.
AUTHOR: Marme, Dieter (correspondence)
CORPORATE SOURCE: Tumor Biology Center, Institute of Molecular Oncology, Breisacherstrasse 117, 79106 Freiburg, Germany. marme@tumor.bio.uni-freiburg.de
SOURCE: Journal of Cancer Research and Clinical Oncology, (Nov 2003) Vol. 129, No. 11, pp. 607-620.
Refs: 89
ISSN: 0171-5216 CODEN: JCROD7
COUNTRY: Germany
DOCUMENT TYPE: Journal; General Review; (Review)
FILE SEGMENT: 016 Cancer
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
ENTRY DATE: Entered STN: 29 Dec 2003
Last Updated on STN: 29 Dec 2003

L14 ANSWER 2 OF 5 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 2003373828 EMBASE
TITLE: Anti-cancer drug discovery and development summit.
AUTHOR: Blakey, David C. (correspondence)
CORPORATE SOURCE: AstraZeneca, Alderley Park, Macclesfield, Cheshire SK10 4TF, United Kingdom. david.blakey@astrazeneca.com
SOURCE: Expert Opinion on Investigational Drugs, (1 Sep 2003) Vol. 12, No. 9, pp. 1577-1582.
Refs: 15
ISSN: 1354-3784 CODEN: EOIDER
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Conference Article; (Conference paper)
FILE SEGMENT: 016 Cancer
030 Clinical and Experimental Pharmacology
037 Drug Literature Index
038 Adverse Reactions Titles
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 2 Oct 2003
Last Updated on STN: 2 Oct 2003

AB The 5th Annual Anti-Cancer Drug Discovery and Development Summit brought together an international group of academic and industry scientists to discuss recent therapeutic developments in the field of oncology. The focus of the meeting was novel targeted approaches, i.e., those agents directed against targets that are overexpressed or overactive in tumour cells. It was acknowledged that cytotoxic agents will continue to play a key role in the treatment of cancer and new developments in this area were also discussed. With over 400 anticancer drugs in clinical development and a number of recent registrations, there is great optimism that significant therapeutic advances can be made.

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ACCESSION NUMBER: 2003363876 EMBASE

TITLE: American Association for Cancer Research - 9th Annual Meeting: Investigating drugs: 11-14 July 2003, Washington, DC, USA.

AUTHOR: Mackay, Janie (correspondence); Williams, Laura

CORPORATE SOURCE: Thomson Current Drugs, Middlesex House, 34-42 Cleveland Street, London W1T 4JE, United Kingdom. laura.williams@current-drugs.com; janie.mackay@current-drugs.com

SOURCE: IDrugs, (1 Aug 2003) Vol. 6, No. 8, pp. 736-738.
ISSN: 1369-7056 CODEN: IDRUFN

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Conference Article; (Conference paper)

FILE SEGMENT: 016 Cancer
030 Clinical and Experimental Pharmacology
036 Health Policy, Economics and Management
037 Drug Literature Index
038 Adverse Reactions Titles
052 Toxicology

LANGUAGE: English

ENTRY DATE: Entered STN: 25 Sep 2003
Last Updated on STN: 25 Sep 2003

L14 ANSWER 4 OF 5 EMBASE COPYRIGHT (c) 2009 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003276961 EMBASE

TITLE: Kinases - SMI Conference 9-10 April 2003, London, UK.

AUTHOR: Harrison, Ruth (correspondence)

CORPORATE SOURCE: Thomson Current Drugs, Middlesex House, 34-42 Cleveland Street, London W1T 4LB, United Kingdom. ruth.harrison@current-drugs.com

SOURCE: IDrugs, (1 Jun 2003) Vol. 6, No. 6, pp. 560-562.
ISSN: 1369-7056 CODEN: IDRUFN

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; Conference Article; (Conference paper)

FILE SEGMENT: 029 Clinical and Experimental Biochemistry
030 Clinical and Experimental Pharmacology
031 Arthritis and Rheumatism
037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 24 Jul 2003
Last Updated on STN: 24 Jul 2003

AB Dr. Moss briefly summed up the conference by describing the growth in the development of kinase research over the years and the commitment being invested by companies aiming to find effective screening strategies. He closed the day by remarking on the new challenge for researchers of turning the concepts discussed into successful drugs.

L14 ANSWER 5 OF 5 BIOSIS COPYRIGHT (c) 2009 The Thomson Corporation on STN

ACCESSION NUMBER: 2003:501918 BIOSIS

DOCUMENT NUMBER: PREV200300498316

TITLE: Preclinical pharmacokinetics and metabolism of CHIR258, a potent tyrosine kinase inhibitor.

AUTHOR(S): Vora, Jayesh [Reprint Author]; Haroldsen, Peter [Reprint Author]; Renhowe, Paul [Reprint Author]; Heise, Carla [Reprint Author]; Steigerwalt, Ronald [Reprint Author]; Todd, Marque [Reprint Author]; Harris, Alex [Reprint Author]; Samara, Emil [Reprint Author]

CORPORATE SOURCE: Chiron Corporation, Emeryville, CA, USA

SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (July 2003) Vol. 44, pp. 753.
print.
Meeting Info.: 94th Annual Meeting of the American
Association for Cancer Research. Washington, DC, USA. July
11-14, 2003.
ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 29 Oct 2003
Last Updated on STN: 29 Oct 2003

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	ENTRY	SESSION
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-3.28

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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Nov 27, 2009 (20091127/UP).

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(FILE 'HOME' ENTERED AT 16:47:45 ON 02 DEC 2009)

FILE 'REGISTRY' ENTERED AT 16:47:57 ON 02 DEC 2009

L1 1 S CHIR 258/CN
L2 31 S 405169-16-6/CRN

FILE 'CAPLUS' ENTERED AT 16:49:05 ON 02 DEC 2009

L3 64 S L2
L4 2 S L3 AND AD<20031107

FILE 'REGISTRY' ENTERED AT 16:49:48 ON 02 DEC 2009

FILE 'CAPLUS' ENTERED AT 16:49:49 ON 02 DEC 2009
L5 0 S 1000873-96-0/DR

FILE 'REGISTRY' ENTERED AT 16:50:24 ON 02 DEC 2009

L6 1 S 1000873-96-0/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'CAPLUS' ENTERED AT 16:50:46 ON 02 DEC 2009

L7 63 S L6
L8 2 S L7 AND AD<20031107

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 16:51:43 ON 02 DEC 2009

L9 0 S L2

FILE 'REGISTRY' ENTERED AT 16:51:51 ON 02 DEC 2009

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L10 SEL L2 1- CHEM : 36 TERMS

SET SMARTSELECT OFF

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 16:51:53 ON 02 DEC 2009

L11 107 S L10
L12 93 S L11 AND (?CANCER? OR ?TUMOR? OR ?TUMOUR? OR ?NEOPLASM?)
L13 87 DUP REM L12 (6 DUPLICATES REMOVED)
L14 5 S L13 AND PD<20031107

FILE 'STNGUIDE' ENTERED AT 16:53:40 ON 02 DEC 2009

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---Logging off of STN---

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Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.07	76.20
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-3.28

STN INTERNATIONAL LOGOFF AT 16:54:08 ON 02 DEC 2009